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Application Serial Number:	_/0/6/8,839
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- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
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Revised 04/24/2003



DATE: 07/25/2003

OIPE

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PATENT APPLICATION: US/10/618,839
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              Cheng, Guangjie
              McCoy, James
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Modulating Factors
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     10 <130> FILE REFERENCE: 05501-0211 (43150-286808)
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C--> 12 <141> CURRENT FILING DATE: 2003-07-14
     12 <150> PRIOR APPLICATION NUMBER: US 60/395,498
     13 <151> PRIOR FILING DATE: 2002-07-12
     15 <160> NUMBER OF SEQ ID NOS: 19
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RAW SEQUENCE LISTING

63

RAW SEQUENCE LISTING

DATE: 07/25/2003 PATENT APPLICATION: US/10/618,839 TIME: 07:58:42

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RAW SEQUENCE LISTING DATE: 07/25/2003 PATENT APPLICATION: US/10/618,839 TIME: 07:58:42

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\07252003\J618839.raw

	Pro	Pro	Glu	Ser	_	Lys	Trp	Ile	Leu		Pro	Val	Ile	Leu	-	Ile	
131					270					275					280		
	tgt																1097
	Cys	Glu	Arg		Leu	Arg	Phe	Tyr	_	Ser	Gln	Gln	Lys		Val	Ile	
135				285					290					295			
	acc																1145
	Thr	Lys		Val	Met	His	Pro		Lys	Val	Leu	Glu		Gln	Met	Asn	
139			300					305					310				
	aag																1193
	Lys	_	Gly	Phe	Ser	Met		Val	Gly	Gln	Tyr		Phe	Val	Asn	Cys	
143		315					320					325					
	ccc																1241
	Pro	Ser	TTe	Ser	Leu		GLu	Trp	Hıs	Pro		'l'hr	Leu	Thr	Ser		
	330					335					340					345	4000
	cca																1289
	Pro	GIU	Glu	Asp		Pne	Ser	TTE	HIS		Arg	Ala	Ala	GTA	_	Trp	
151					350					355					360		1007
	aca	-					-		-								1337
	Thr	GIU	ASII		тте	Arg	Ата	Pne		GIN	GIN	Tyr	ser		ше	Pro	
155	. ~ ~		~	365	~~+				370					375			1205
	agg																1385
	Arg	ше	380	vaı	Asp	СТА	Pro	385	СТА	Thr	Ата	ser		Asp	vaı	Pne	
159	~~~	+ -+		~+ ~	~~+	~+ ~	a+ a		~~^	~~~	~~~	~ + +	390	~+ ~			1/22
	cag																1433
163	Gln	395	GIU	vaı	Ala	val	400	val	GTA	Ата	GIY	405	GIY	vaı	1111	PIO	
	ttt		t ct	atc	t t a	222		ato	taa	tac	222		C a C	tat	ac a	a a c	1481
	Phe	-			_								_	_	_	_	1401
	410	111.0	JCI	110	пси	415	JCI	116	тър	тут	420	1110	OIII	Суз	лта	425	
	cac	aac	ctc	222	aca		aan	atc	tat	ttc		taa	atc	tac	aaa		1529
	His						_							_			1323
171			БСС	цуб	430	Lyo	БуО	110	- y -	435	- y -	111	110	Cyb	440	O1 u	
	aca	aat	acc	ttt		t.aa	ttc	aac	aac		t.t.a	act	t.cc	cta		caq	1577
	Thr		-							_	_			-	-	_	
175		1		445					450					455			
	gag	atq	qaq	gaa	tta	qqc	aaa	ata		ttt	cta	aac	tac		ctc	ttc	1625
	Glu																
179			460			4	-	465	_				470	_			
181	ctc	acc	qqa	tgg	qac	agc	aat	att	gtt	ggt	cat	qca	qca	tta	aac	ttt	1673
	Leu																
183		475	-	_	-		480			-		485					
185	gac	aag	gcc	act	gac	atc	gtg	aca	ggt	ctg	aaa	cag	aaa	acc	tcc	ttt	1721
	Asp																
187	490					495					500					505	
	ggg																1769
190	Gly	Arg	Pro	Met	Trp	Asp	Asn	Glu	Phe	Ser	Thr	Ile	Ala	Thr	Ser	His	
191					510					515					520		
	CCC																1817
194	Pro	Lys	Ser	Val	Val	Gly	Val	Phe	Leu	Cys	Gly	Pro	Arg	Thr	Leu	Ala	

RAW SEQUENCE LISTING DATE: 07/25/2003 PATENT APPLICATION: US/10/618,839 TIME: 07:58:42

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\07252003\J618839.raw

```
195
                     525
                                          530
                                                               535
     197 aag agc ctg cgc aaa tgc tgt cac cga tat tcc agt ctg gat cct aga
                                                                                1865
     198 Lys Ser Leu Arg Lys Cys Cys His Arg Tyr Ser Ser Leu Asp Pro Arg
                540
                                      545
     201 aag gtt caa ttc tac ttc aac aaa gaa aat ttt tga gttataggaa
                                                                                1911
     202 Lys Val Gln Phe Tyr Phe Asn Lys Glu Asn Phe
             555
                                  560
     205 taaqqacqqt aatctqcatt ttqtctcttt qtatcttcaq taattqaqtt ataqqaataa
                                                                                1971
W--> 207 ggacggtaat ctgcattttg tctctttgta tcttcagtaa tttacttggt ctcntcaggt
     209 ttgancagtc actttaggat aagaatgtgc ctctcaagcc ttgactccct ggtattcttt
                                                                                2091
     211 ttttgattgc attcaacttc gttacttgag cttcagcaac ttaagaactt ctgaagttct
                                                                                2151
     213 taaagttctg aanttcttaa agcccatgga tcctttctca gaaaaataac tgtaaatctt
                                                                                2211
     215 totggacage catgactgta gcaaggettg atagcagaag tttggtggtt canaattata
                                                                                2271
     217 caactaatcc caggtgattt tatcaattcc agtgttacca tctcctgagt tttggtttgt
                                                                                2331
     219 aatettttgt cecteceace eecacagaag attttaagta gggtgaettt ttaaataaaa
                                                                                2391
     221 atttattgaa taattaatga taaaacataa taataaacat aaataataaa caaaattacc
                                                                                2451
     223 gagaacccca tccccatata acaccaacag tgtacatgtt tactgtcact tttgatatgg
                                                                                2511
     225 tttatccagt gtgaacagca atttattatt tttgctcatc aaaaaataaa ggattttttt
                                                                                2571
                                                                                2609
     227 tcacttgaaa aaaaaaaaaa aaaaaaaaa aaaaaaaa
     230 <210> SEQ ID NO: 2
     231 <211> LENGTH: 564
     232 <212> TYPE: PRT
     233 <213> ORGANISM: Homo sapiens
                                                                  These do not apply to
this sequence. Only
564 residues in this
sequence it is also
a peptide sequence
     235/<220> FEATURE:
     23/6 <221> NAME/KEY: misc feature
     2\beta7 <222> LOCATION: (2025)...(2025)
     2/38 <223> OTHER INFORMATION: "n" = any nucleotide
     240 <220> FEATURE:
     241 <221> NAME/KEY: misc feature
     242 <222> LOCATION: (2036)..(2036)
     243 <223> OTHER INFORMATION: "n" = any nucleotide
     245 <220> FEATURE:
     246 <221> NAME/KEY: misc feature
     247 <222> LOCATION: (2164)..(2164)
     248 <223> OTHER INFORMATION: "n" = any nucleotide
     250 <220> FEATURE:
     251 <221> NAME/KEY: misc feature
     252 <222> LOCATION: (2264)..(2264)
     253 <223> OTHER INFORMATION: "n" = any nucleotide
     255 <400> SEQUENCE: 2
     257 Met Gly Asn Trp Val Val Asn His Trp Phe Ser Val Leu Phe Leu Val
     261 Val Trp Leu Gly Leu Asn Val Phe Leu Phe Val Asp Ala Phe Leu Lys
                                          25
     265 Tyr Glu Lys Ala Asp Lys Tyr Tyr Tyr Thr Arg Lys Ile Leu Gly Ser
     269 Thr Leu Ala Cys Ala Arq Ala Ser Ala Leu Cys Leu Asn Phe Asn Ser
     270
                                  55
```

273 Thr Leu Ile Leu Leu Pro Val Cys Arg Asn Leu Leu Ser Phe Leu Arg

RAW SEQUENCE LISTING DATE: 07/25/2003 PATENT APPLICATION: US/10/618,839 TIME: 07:58:42

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\07252003\J618839.raw

274	65					70					7 5					0.0
		Thr	Cuc	C 0 x	Dho		C 0 x	7\ ~~ ~	መኤኤ	т	75	T	C1	T	70	80
278	сту	1111	Cys	Set	85	Cys	ser	Arg	IIII		Arg	гуѕ	GIN	ьeu		HIS
	7 an	Tan	mb w	Dh.a		T	T	171	7.1.	90	14 - 1	- 1	~	-	95	m.\
282	ASII	ьеи	1111		HIS	ьуѕ	ьeu	Val		Tyr	мет	тте	Cys		His	Thr
	7.1.	т1.	113 -	100	т1.	7 .1 -	,,	Ŧ.	105		D.)	_	_	110	_	_
	Ата	TTE		тте	тте	Ala	HIS	Leu	Pne	Asn	Phe	Asp		Tyr	Ser	Arg
286	0	7	115	7. 7		_	~ 1	120	_		_		125	_		
	ser		GIN	Ala	Thr	Asp		Ser	Leu	Ala	Ser		Leu	Ser	Ser	Leu
290		130	_	~1	_	_	135		_	_		140				
293	Ser	HlS	Asp	Glu	Lys		GLy	Gly	Ser	Trp		Asn	Pro	Ile	Gln	Ser
	145		mı	en 1		150	_				155	_		_		160
	Arg	Asn	Thr	Thr		GLu	Tyr	Val	Thr		Thr	Ser	Val	Ala		Leu
298	ml	0 1	1	- 1	165	1	- 1		_	170	_				175	_
	Thr	GTÀ	val		Met	Thr	TTe	Ala		Ile	Leu	Met	Val		Ser	Ala
302	m i	~ 1		180	_	_	_	_	185					190		
305	Thr	Glu		lle	Arg	Arg	Ser	Tyr	Phe	Glu	Val	Phe		Tyr	Thr	His
306		-	195			_		200		_			205			
	HIS		Phe	lle	Phe	Tyr	lle	Leu	GLy	Leu	Gly		His	Gly	Ile	Gly
310	0.1	210		_	~ 1		215					220				
313	GLY	тте	Val	Arg	GLy		Thr	Glu	Glu	Ser		Asn	Glu	Ser	His	
-	225	-	_		~ 1	230				_	235					240
	Arg	Lys	Cys	Ala		Ser	Phe	Glu	Met		Asp	Asp	Arg	Asp		His
318	_	_	_	_	245					250					255	
	Cys	Arg	Arg		Lys	Phe	Glu	Gly		Pro	Pro	Glu	Ser	_	Lys	Trp
322	- 1	_		260			_	_	265	_				270		
	TTE	Leu		Pro	Val	ile	Leu	Tyr	lle	Cys	Glu	Arg		Leu	Arg	Phe
326	ш	70	275	0.1	~ 1	-	** 3	280	~ 1		_		285			
			Ser	GIn	GIn	Lys		Val	lle	Thr	Lys		Val	Met	His	Pro
330	C	290	TT - 7	T .	C 1	-	295			_	_	300		_		
227	ser	гÀг	val	ьeu	GIU		GIn	Met	Asn	ьуs		GLy	Phe	Ser	Met	
	305	C1	C1	m	 1 -	310	77.7		^	_	315	1	_	_	_	320
338	vaı	сту	GIN	Tyr		Pne	vaı	Asn	Cys		Ser	ше	Ser	Leu		Glu
	Trn	шіс	Dwo	Dha	325	T	шь	C	7.7	330	C1	01	70	D.I	335	
342	пр	птэ	PIO	340	IHL	теп	Inr	Ser		Pro	GIU	GIU	Asp		Phe	Ser
	T10	шіс	т1.		71-	70 70 70	C1	7.00	345	mb w	C1	7	T	350	7	70.7
346	116	1115	355	Arg	нта	Ата	сту	Asp 360	пр	1111	GIU	ASII		тте	Arg	Ата
	Pho	Clu		Cln	Ψ~	Cor	Dro		Dxo	7 ~~~	T1.	C1	365	7	C1	D
350	rne	370	GIII	GIII	ıyı	ser	375	Ile	PIO	Arg	тте		vaı	Asp	GTÀ	Pro
	Pho		Thr	717	Cor	Clu		77-1	Dho	C1 ~	Ф	380	171	71-	17-1	т
354		GIY	1111	нта	ser	390	ASP	Val	Pne	GIII		GIU	vaı	Ala	vaı	
		C1 11	717	C1++	т10		17-1	mh ~	Dwa	Dha	395	C	T1-	т	T	400
358	Val	дту	нта	СТУ	405	СТУ	Val	Thr	PIO		Ата	ser	тте	Leu		Ser
	T10	Trn	П	T		C1=	C	7.1.	7	410	7	т	т	m1	415	-
362	TIE	пр	TYL		rne	GIII	Cys	Ala		HIS	ASI	Leu	ьуs		ьуs	ьуs
	Tla	Ф~	Dho	420	Ψ~∽	T1^	C	7\ ~~~	425	m k	C1		րե -	430	m	Dh
366	тте	тАт		TAL	ттр	тте	cys	Arg	GIU	ınr	стА	нта		ser	rrp	rne
	Λον	λας	435	Ton	Ͳ Ի~	C	Т с	440	C1=	C1	Met	C1	445	т.	C1	T
	MSII		теп	ьeu	1111	ser		Glu	GTU	GIU	мет		GIU	ьeu	стА	глг
370		450					455					460				

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/618,839

DATE: 07/25/2003 TIME: 07:58:43

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\07252003\J618839.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 2025,2036,2164,2264

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 7

DATE: 07/25/2003

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/618,839 TIME: 07:58:43

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\07252003\J618839.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:36 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1, Line#:27 L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1971 M:341 Repeated in SeqNo=1 L:412 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:409 L:734 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5, Line#:731 L:1056 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7, Line#:1053 L:1388 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9, Line#:1385 L:1714 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11, Line#:1711 L:2570 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13, Line#:2567